



HELI

3-3.5 t

H3 series

AC Electric Forklift Truck



Improved operating comfort

- > Foot operation comfort is increased through optimized brake pedal height and accelerating pedal height for comfort shifting.
- > Super low torque steering unit makes steering light and easy.
- > Rear handle with horn button ensures safe and comfortable operation while reverse driving.
- > Mast and rear axle buffering improve driving comfort largely.
- > Ratchet hand brake has different brake force on slope and ground, reducing driver's fatigue.

Optimized maintainability and safety

- > Special side plate and top cover structure is easy for assembly and disassembly.
- > Highly-mounted rear axle increasing transversal stability by 2.1%.
- > Three driving modes offer optional choices to different working condition.
- > Automatic deceleration when steering is optional so as to ensure the operation safety.



Improved driver's view

- > Standard configuration of wide view mast, compact structure of mast and tube pulley block.
- > Large arc roof frame, increasing the driving space.

High efficiency and energy-saving

- > The use of electric truck dedicated tire saves more than 10% of the energy during travelling.
- > LED lamps save 80% of the energy.
- > The professional matching design of the components prolongs the battery working time about 10%.
- > Battery side lift and customized battery side pulling make battery changing easier.



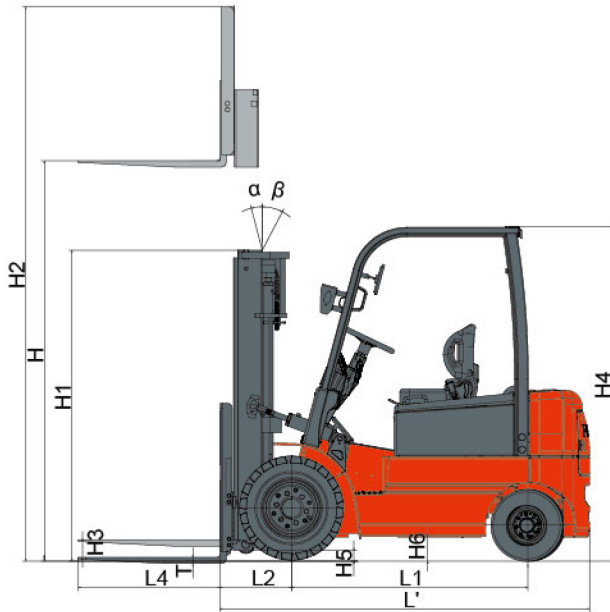
HELI smart fleet management system (optional)

- Vehicle positioning
- Remote diagnosis
- Remote monitoring
- Maintenance reminder
- Battery management
- Statistical form
- Vehicle management
- Identification recognition (optional)
- Weight management (optional)
- Collision management (optional)

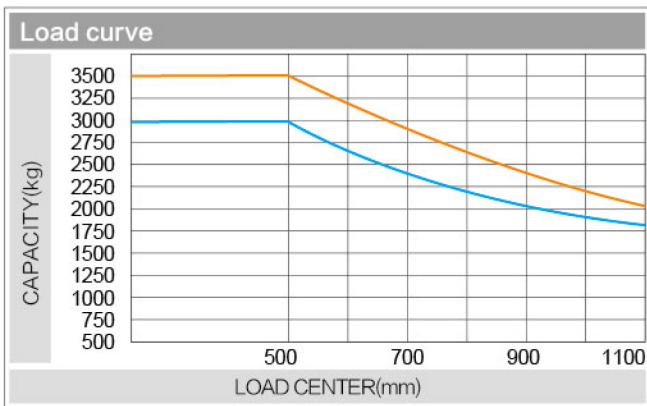
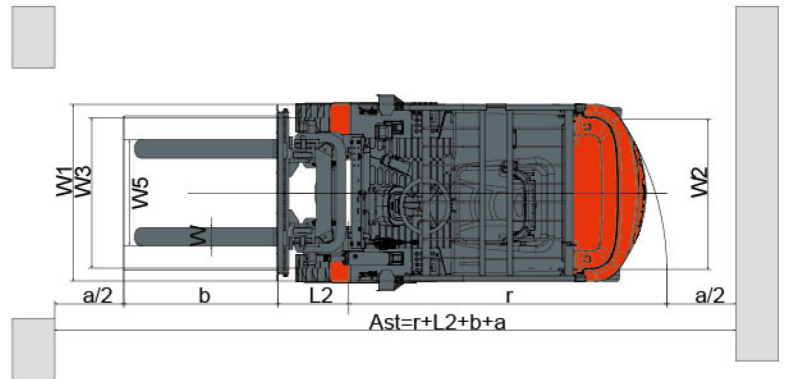
Manufacturer's Data and Design Characteristics

Characteristics			HELI			
1.01	Manufacturer		HELI			
1.02	Model		CPD30	CPD35	CPD30	CPD35
1.03	Configuration number		HB6	HB6	HB3(P)/HB7(P)/ HB8(P)	HB3(P)/HB7(P)/ HB8(P)
1.04	Rated capacity	Q kg	3000	3500	3000	3500
1.05	Load center distance	c mm	500	500	500	500
1.06	Power mode		battery	battery	battery	battery
1.07	Driving mode		seated	seated	seated	seated
1.08	Wheel base	L1 mm	1715	1715	1685	1685
Tyre						
2.01	Tyre type		pneumatic tyre/SE	SE	pneumatic tyre/SE	SE
2.02	Wheels, number front rear (x=driven wheels)		2/2	2/2	2/2	2/2
2.03	Front wheel base	W3 mm	1000	1000	1000	1000
2.04	Rear wheel base	W2 mm	990	990	950	950
2.05	Tyre (front)		28×9-15-14PR	28×9-15	28×9-15-14PR	28×9-15
2.06	Tyre (rear)		200/50-10	200/50-10	18×7-8	18×7-8
Size						
3.01	Front overhang	L2 mm	485	490	485	490
3.02	Mast tilt angle, front/rear	α/β °	6/10	6/10	6/10	6/10
3.03	Height with mast retraction	H1 mm	2075	2180	2075	2180
3.04	Free lifting height	H3 mm	145	150	145	150
3.05	Max. Lifting height	H mm	3000	3000	3000	3000
3.06	Mast height, extended	H2 mm	4230	4230	4230	4230
3.07	Overhead guard height	H4 mm	2215	2215	2215	2215
3.08	Fork size:thickness×width×length	T×W×L4 mm	45×125×1070	50×125×1070	45×125×1070	50×125×1070
3.09	Fork carriage, din standard		3A	3A	3A	3A
3.10	Truck body length (fork excluded)	L' mm	2520	2525	2490	2560
3.11	Truck body width	W1 mm	1245	1245	1241	1241
3.12	Turning radius	r mm	2240	2240	2210	2270
3.13	Clearance between mast and ground	H5 mm	135	135	135	135
3.14	Clearance between wheel base center and ground (loaded)	H6 mm	145	145	145	145
3.15	Right angle stacking aisle width(Pallet1000x1000mm, clearance 200mm)	Ast mm	3995	4000	3895	3960
3.16	right angle stacking aisle width(Pallet1200x1200mm, clearance 200mm)	Ast mm	4125	4130	4095	4160
3.17	Lateral fork adjustment(outside of forks)max./min.	W5 mm	1060/250	1060/250	1060/250	1060/250
Performance						
4.01	Travelling speed: loaded/unloaded	km/h	14/14	12/13	12/13	11/12
4.02	Lifting speed: loaded/unloaded	mm/s	260/400	220/370	240/400	220/370
4.03	Lowering speed: loaded/unloaded	mm/s	-/500	-/500	420/-	420/-
4.04	Gradeability (loaded)	%	15	13	13	11
4.05	Max. Traction force (loaded)	N	17500	19500	12500	13140
4.06	Acceleration time (10m) loaded/unloaded	s	6.1/5.6	6/5.6	6/5.6	6/6
Weight						
5.01	Total weight (with /without battery)	kg	4770/3550	5430/4080	4760/3555	5335/4005
5.02	Axle load: unloaded, front/rear	kg	2430/2340	2630/2800	2210/2550	2475/2860
5.03	Axle load: loaded, front/rear	kg	7150/620	8100/830	6900/860	7840/995
Battery						
6.01	Battery voltage/capacity(discharging capacity in 5 hours)	V/Ah	80/400	80/480	48/700	48/840
6.02	Battery weight	kg	1220 (1220-1626)	1350 (1350-1626)	1205(1205-1625)	1330(1330-1625)
6.03	Battery, DIN standard		43536A	43536A	43531B	43531B
Motor and controller						
7.01	Driving motor power (s2-60min)	kW	11	11	11	11
7.02	Lifting motor power (s3-15%)	kW	13.5	13.5	15	15
7.03	Drive motor controlling mode		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
7.04	Lifting motor controlling mode		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
Others						
8.01	Service brake/parking brake		hydraulic/mechanical	hydraulic/mechanical	hydraulic/mechanical	hydraulic/mechanical
8.02	Hydraulic system working pressure	Mpa	21	21	21	21

NOTE: 1.Detailed information about battery, please contact our salesmen or engineer.
 2.For configuration number, 3: Inmotion Controller. 6: HELI TECHNOLOGY Controller.7: SANTROLL Controller. 8: FJ Controller.
 3."P" battery side extraction (side pulling or side loading),side loading for standard.
 4.Small capacity battery is recommended to be used in the condition of less climbing and low working frequency.



Ast: Right angle stacking aisle width
 a: Clearance
 b: Load Length



3.0t 3.5t

Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. the standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.



RENEWABLE ENERGY TECHNOLOGIES

With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.



15%

WIDE VIEW MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)(kg)				Mast overall height (fork to the ground)(mm)		Service weight(kg)				Mast tilt angle $\alpha/\beta(^{\circ})$
		CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6	3t	3.5t	CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6	
M200	2000	3000	3500	3000	3500	1570	1680	4665	5235	4675	5330	6/10
M250	2500	3000	3500	3000	3500	1820	1930	4705	5285	4715	5380	6/10
M300	3000	3000	3500	3000	3500	2070	2180	4760	5335	4770	5430	6/10
M330	3300	3000	3500	3000	3500	2220	2330	4790	5365	4800	5460	6/10
M350	3500	3000	3500	3000	3500	2320	2430	4810	5385	4820	5480	6/10
M370	3700	3000	3300	3000	3400	2420	2530	4840	5405	4850	5500	6/6
M400	4000	2850	3150	2900	3350	2620	2730	4905	5480	4915	5575	6/6
M425	4250	2750	3050	2800	3250	2745	2855	4930	5505	4940	5600	6/6
M450	4500	2600	2800	2700	3100	2870	2980	4955	5530	4965	5625	6/6
M500	5000	2200 *2350	2450 *2500	2300 *2450	2650 *2800	3120	3230	5005	5580	5015	5675	6/6
M550	5500	1950 *2150	2300 *2350	2100 *2350	2500 *2600	3420	3530	5085	5670	5095	5765	3/6
M600	6000	1300 *1900	1450 *2100	1400 *2050	1550 *2400	3670	3780	5135	5715	5145	5810	3/6

NOTE: (1) * refers to rated capacity with double tires.

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)(kg)				Mast overall height (mm)		Free lifting height (with backrest)(mm)				Service weight(kg)				Mast tilt angle $\alpha/\beta(^{\circ})$
		CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6	3t	3.5t	CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6	CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6	
ZM200	2000	3000	3500	3000	3500	1570	1680	388	503	380	500	4706	5301	4716	5396	6/10
ZM250	2500	3000	3500	3000	3500	1820	1930	638	753	630	750	4750	5345	4760	5440	6/10
ZM300	3000	3000	3500	3000	3500	2070	2180	888	1003	880	1000	4796	5390	4806	5485	6/10
ZM330	3300	3000	3500	3000	3500	2220	2330	1038	1153	1030	1150	4823	5417	4833	5512	6/10
ZM350	3500	3000	3500	3000	3500	2320	2430	1138	1253	1130	1250	4841	5435	4851	5530	6/10
ZM370	3700	3000	3200	3000	3400	2420	2530	1238	1353	1230	1350	4859	5453	4869	5548	6/6
ZM400	4000	2850	3200	2900	3350	2620	2730	1438	1553	1430	1550	4931	5527	4941	5622	6/6
ZM425	4250	2650	3050	2800	3250	2745	2855	1563	1678	1555	1675	4953	5549	4963	5644	6/6
ZM450	4500	2500	2850	2700	3100	2870	2980	1688	1803	1675	1800	4976	5572	4986	5667	6/6
ZM500	5000	2100 *2600	2350 *2750	2400 *2800	2650 *3050	3120	3230	1938	2053	1930	2050	5021	5617	5031	5712	6/6
ZM550	5500	1950 *2400	2200 *2550	2100 *2550	2500 *2850	3420	3530	2238	2353	2230	2350	5111	5709	5121	5804	3/6
ZM600	6000	1300 *2000	1350 *2200	1500 *2150	1650 *2500	3670	3780	2488	2603	2480	2600	5158	5755	5168	5850	3/6

NOTE: (1) * refers to rated capacity with double tires.
(2) 3-3.5T: free lifted height 396mm increased without backrest.

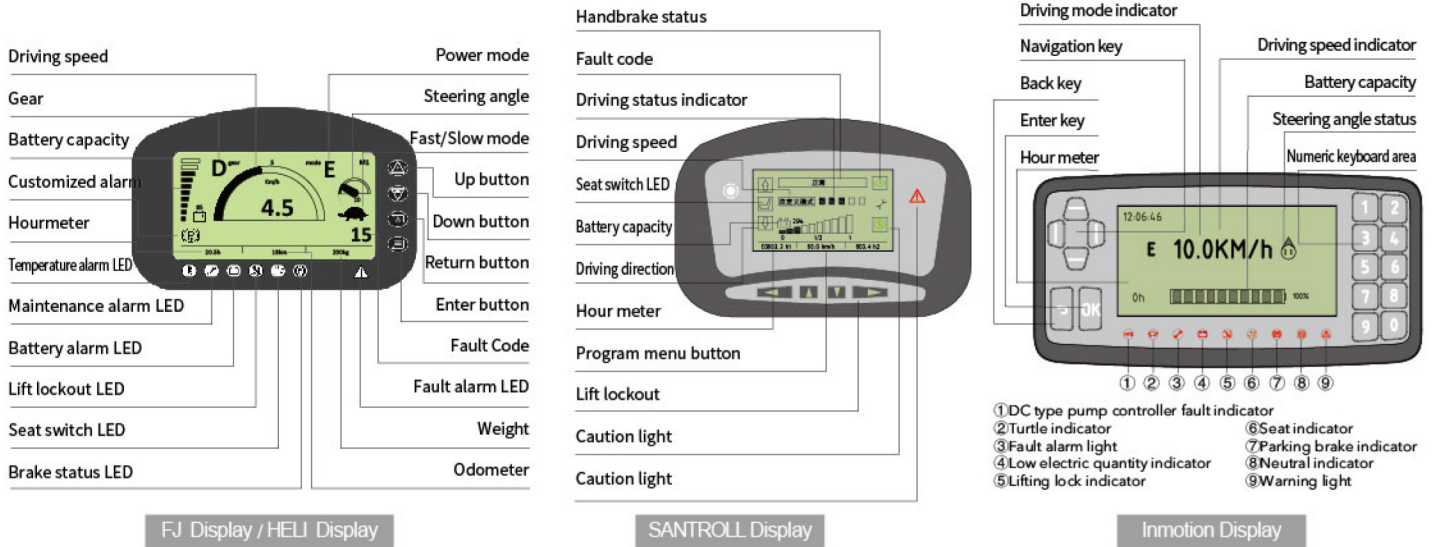
WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)(kg)				Mast overall height (mm)	Free lifting height (with backrest)(mm)				Service weight(kg)				Mast tilt angle $\alpha/\beta(^{\circ})$
		CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6		3-3.5T	CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	CPD35-HB6	CPD30-HB3(P)/HB7(P)/HB8(P)	CPD35-HB3(P)/HB7(P)/HB8(P)	CPD30-HB6	
ZSM360	3600	2850	3250	2950	3400	1930	748	753	740	745	5015	5560	5025	5655	6/6
ZSM400	4000	2750	3100	2850	3250	2055	873	878	865	870	5050	5595	5060	5690	6/6
ZSM435	4350	2550	2950	2700	3150	2180	998	1003	990	995	5085	5630	5095	5725	6/6
ZSM450	4500	2450	2850	2650	3000	2230	1048	1053	1040	1045	5101	5646	5111	5741	6/6
ZSM470	4700	2400	2650	2650	2900	2230	1048	1053	1140	1048	5105	5650	5115	5745	6/6
ZSM480	4800	2350	2550	2550	2800	2330	1148	1153	1140	1145	5130	5675	5140	5770	6/6
ZSM500	5000	2100 *2550	2350	2250 *2700	2650	2430	1248	1253	1240	1245	5159	5704	5169	5799	6/6
ZSM540	5400	1950 *2350	2200	2100 *2500	2500	2555	1373	1378	1365	1370	5194	5739	5204	5834	3/6
ZSM600	6000	1250 *2200	1300 *2400	1400 *2350	1600 *2700	2780	1598	1603	1590	1595	5293	5838	5303	5933	3/6
ZSM650	6500	950 *1900	1000 *2200	1100 *2050	1300 *2500	2970	1788	1793	1788	1793	5346	5891	5356	5986	3/3
ZSM700	7000	550 *1800	700 *2000	700 *1950	1000 *2300	3240	2058	2063	2058	2063	5430	5975	5440	6070	3/3

NOTE: (1) * refers to rated capacity with double tires.
(2) 3-3.5T: free lifted height 397mm increased without backrest.

Reliable special designed instrument

The reliable special instrument gives a complete display of the vital information, like operation status, fault detection, etc. It ensures the operator predominate the vehicle status more intuitive and convenient.



Standard configuration

- Wide view basic mast
- Standard fork
- II (III) stage fork arm carrier
- Backrest
- Control valve
- Battery
- Standard seat
- Overhead guard
- Overhead guard rain cover
- Liquid crystal combined instrument
- Traction pin
- Driver' s tool
- LED lamp
- Horn alert function on rear handle

Optional device

- String rod
- Driver' s cab
- Lifting hock
- Cargo boom
- Tip-over fork
- Side shifting
- Paper roll clamp
- Warning light (flashing, totating , buzzing)
- solid tyre
- Rear working light
- Steel protection net
- Multipurpose drum clamp
- Load stabilizer
- Widen fork arm carrier

- Lengthening fork
- Load pusher
- Lengthening fork extension
- Rotating flat clamp
- Dual-tyre with protection device
- Auxiliary hydraulic valve component
- Tilting/steering cylinder jacket
- Coloring tyre
- Wide view two/three stage full free mast
- Customer made color
- Turn automatic deceleration function
- Battery lifting sling
- HELI smart fleet management system